

Nutritional Status Assessment of Minodar Residence in Qazvin City, Iran: Vitamin D Deficiency in Sunshine Country, a Public Health Issue

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Abstract

Introduction: Nutrition has main effect on health or disease and results of nutrition assessment can be used in health planning of communities. Therefore we aimed to conduct the nutrition assessment especially vitamin D statue of an urban region in Qazvin city.

Methods: In a cross sectional study in year 2011, subjects who were randomly selected from residents of aged ≥ 20 years old in Minodar, an urban region of Qazvin city participated in this study. A 3-days food diary questionnaire was used to collect food consumption data and weight and height of subjects were measured. The food intake was analysis using "Nutrition 4, Diet analysis, Module version 3.5.2".

Results: The participants included 930 subjects (434 M and 496 F) having Mean BMI = 26 ± 4.4 kg/m² and 60% of subjects were either overweight or obese. Daily energy intake of 50% of subjects was more than 2500 (13.6% from proteins, 55.6% from carbohydrate and 30.5% from fat sources). The daily cholesterol intake among 50-75% of population was more than daily recommended of 300 mg. The mean iron and zinc intakes were 17 ± 5.6 and 12 ± 4.5 mg/day and the intakes were highest in aged group of 20-29, while reduced in older groups. Vitamin A deficiency was observed in studied population and 75% of them were receiving less than daily recommended allowance of 800 μ g/day, 25% of total studied population was receiving less than 400 μ g/day. Vitamin D ingestion among 90-95% of participants was less than minimum daily recommended amount of 10 μ g/day and calcium intake in 50-75% of studied population was less than recommended daily allowance of 800 mlg/day. High amount of florid and caffeine ingestion from black tea was observed among population and 75% of population had florid intake of 10000 m μ /day.

Conclusion: In general, majority of the population of region had higher amount intake of fat, cholesterol, low intake of calcium and vitamin D

Keywords: nutrition assessment, energy, mineral, vitamin D

1. Introduction

Nutrition has main effect on health or disease and results of nutrition assessment can be used in health planning of communities. Micronutrients deficiencies such as vitamin A, D, Ca²⁺ and Iron have been demonstrated in different countries including Iran. In previous study (ERC Accessed Sep.2012) in Tehran population it was demonstrated that 30% of energy intake was from fat sources and cholesterol intake was higher than RDA recommendation of 300 mg. The Ca²⁺ and Iron intake were lower than RDA recommendation (Mahan and Escott-Stump, 2012).